## (57) Abstract

The invention relates to a method and apparatus for suppressing interference in an electric signal, particularly for suppressing interference in an electrocardiogram (ECG) signal in connection with magnetic resonance imaging (MRI). In order to improve the accuracy of the suppression, the electric signal is first sampled at a high sampling frequency, whereby a first sequence of samples is obtained. Some of the samples in the first sequence of samples are then selected on the basis of predetermined criteria. The first sequence is then downsampled using the selected samples, whereby a second sequence of samples is obtained. The second sequence forms a digital presentation of the electric signal in which the interference is suppressed. (FIG. 3a)